

ABSTRACT

A non-symmetric drive type piezoelectric ceramic transformer has been disclosed in the present invention. The non-symmetric drive type piezoelectric ceramic transformer has a rectangular piezoelectric ceramic conductor. Along the length of rectangular piezoelectric ceramic conductor, it is divided into three zones: the first zone is the oscillation node accommodate zone of the length adjusting, that the change of length can adjust the resonance frequency and the oscillation node of the piezoelectric ceramic transformer; the second zone is input drive zone, which upper of lower surface have been coated with electrodes and polarized in the direction of the thickness; the third zone is the output generation zone, which output terminals are coated with electrodes and polarized in the direction of the length of the conductor. The piezoelectric ceramic transformer having above structure has the advantages of smaller dimension, less input phase changes, less generating heat, higher efficiency, and the piezoelectric ceramic transformer has the adjustable resonance frequency and the oscillation node, simply formation process, lower cost of fabrication. The piezoelectric ceramic transformer can be used in high voltage power sources, and back-light sources of liquid crystal display to drive cold cathode florescent lamps.